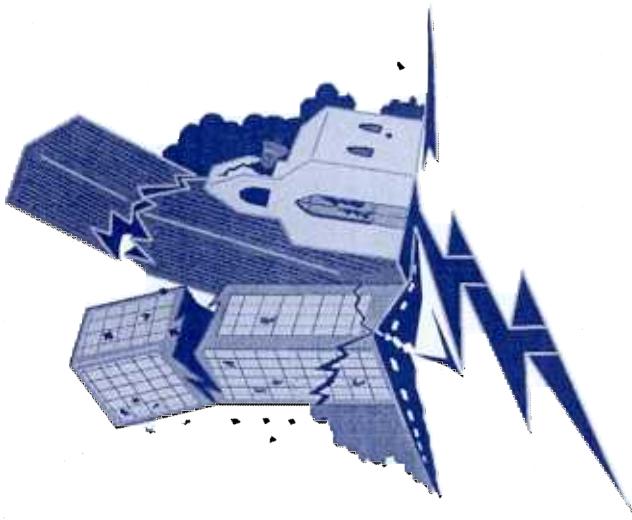


The Relationship Between Richter Magnitude and Modified Mercalli Intensity

Richter	Mercalli	Description
2	I	Not felt or rarely felt under favorable circumstances. Sometimes, under certain conditions: <ul style="list-style-type: none"> • trees, structures, liquids and bodies of water sway; • dizziness or nausea may be experienced; • doors sway very slowly; • birds and animals are uneasy or disturbed.
3	II	Felt indoors by a few persons, especially on upper floors, or by sensitive or nervous persons. Sometimes: <ul style="list-style-type: none"> • Hanging objects sway; • trees, structures, liquids and bodies of water sway; • dizziness or nausea may be experienced; • doors sway very slowly.
4	III	Felt indoors by a number of people. Motion is usually a rapid vibration, and sometimes earlike. <ul style="list-style-type: none"> • Vibrations are not at first recognized as an earthquake; • movements is significant on upper levels of tall buildings; • standing vehicles rock slightly; • hanging objects swing.
5	IV	Felt indoors by many and outdoors by a few. <ul style="list-style-type: none"> • A few people awaken, especially light sleepers; • vibrations feel like those of a heavy truck passing by; • dishes, windows and doors rattle; • walls and frame structures creak; • liquids in open vessels are slightly disturbed; • standing vehicles rock noticeably.
6	V	Felt indoors and outdoors by most people. Outdoors, the direction of the earthquake could be estimated. <ul style="list-style-type: none"> • Buildings tremble; • dishes and glassware break; • small or unstable objects overturn and may fall; • doors and shutters open or close abruptly; • small objects move, and furnishings move slightly; • liquids in well-filled open containers spill slightly.
7	VI	Felt by all people indoors or outdoors. <ul style="list-style-type: none"> • People move unsteadily; • some plaster cracks, and fine cracks appear in chimneys; • dishes, glassware and windows break; • knick-knacks, books and pictures fall; • some furniture overturns; • moderately heavy furniture moves.
8	VII	All people are frightened and run outdoors, general alarm. <ul style="list-style-type: none"> • Many people find it difficult to stand; • water is stirred and muddled; • some sand and gravel stream banks cave in; • chimneys crack considerably, and walls crack somewhat; • plaster and stucco fall in considerable amounts; • loosened bricks and tiles fall.
9	X	
10	XI	
11	XII	

SAVE Volunteers



Earthquakes in Missouri

SAVE Volunteers

It is estimated that a major disaster such as a large earthquake (6.7 Richter magnitude) in the New Madrid Fault Zone will significantly damage more than 6% or 32,000 of the buildings in eastern Missouri. Approximately 120,000 people will require emergency shelter and 6% of business establishments will need inspection or repair of their facilities before business can resume. “*After shocks*” following an earthquake will cause further damage, including complete collapse of many initially damaged buildings. A quick recovery will require timely assessment of damaged structures. It is likely that about 90% of the damaged buildings will actually be safe to re-occupy with only minor repair and clean-up. The repeat interval for major earthquakes of the 6.0/7.0 Richter magnitude ranges from 45 to 85 years. The last major New Madrid earthquake (6.2 Richter) was October 31, 1895.

Due to the continuing threat of disaster, particularly earthquakes, there is a need for a plan and an organization to assist the state and local governments in assessing the safety and serviceability of buildings within their jurisdictions. Following catastrophic events, unsafe buildings of all types pose serious hazards to their occupants. Key facilities such as emergency operating centers, those who direct and coordinate emergency response organizations, and other high occupancy buildings are priority locations that are critical to the recovery of the community from the catastrophic event.

Under such stressful conditions, it is essential that advance planning be in place to provide an organized and quick response to determine the adequacy or inadequacy of buildings for their intended use. **SAVE** Volunteers are part of a program for providing qualified volunteers with experience and training in building design and construction to structurally assess buildings and vertical structures following catastrophic events.

The *Structural Assessment and Visual Evaluation* (**SAVE**) of buildings and vertical structures will be performed by a group of

architects, professional engineers, and other qualified volunteers as established in RSMO 44.023 and referred to as qualified volunteers. Architects and professional engineers will assist SEMA through the **SAVE** Coalition which includes the following four organizations:

- American Institute of Architects/Missouri (AIA/MO)
- American Society of Civil Engineers (ASCE)
- Consulting Engineers Council of MO (CECMo)
- Missouri Society of Professional Engineers (MSPE)

Objective

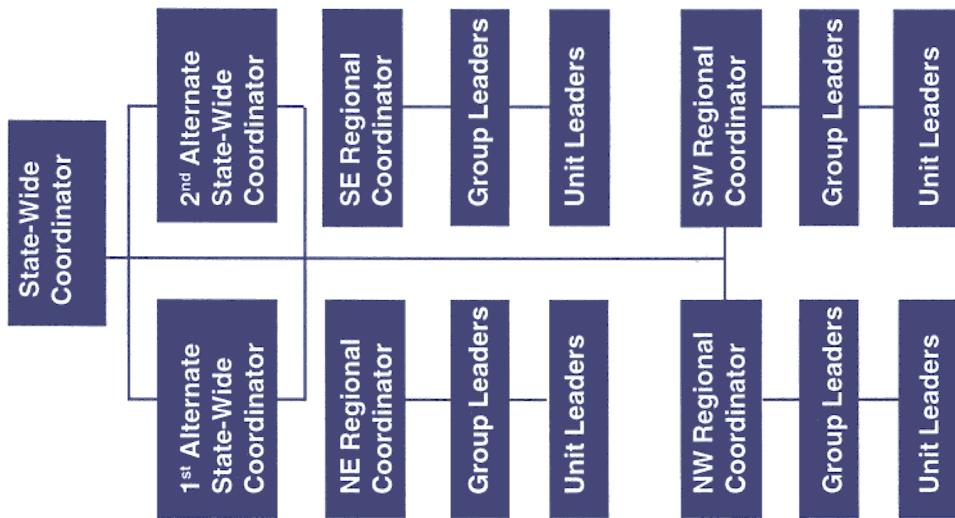
The **SAVE** Coalition’s objective is to assist the Missouri State Emergency Management Agency (SEMA) in the execution of its responsibilities with respect to the use of qualified volunteers in the emergency assessment of buildings following catastrophic events.

The use of qualified volunteers under RSMO 44.023 is limited in scope to the assessment of buildings and vertical structures. In the event of a disaster, there will be an obvious need to assess other types of structures. This will be done by those having the responsibility of construction and maintenance. Highways, roads and bridges will be inspected by the Missouri Department of Transportation and local Public Works Departments. The inspection of utility lines, pipelines, sewage and water lines and systems, railroads and airports will be the responsibility of their respective owners/managers. The US Army Corps of Engineers and the Missouri Department of Natural Resources will inspect dams and reservoirs.

How To Sign Up

In Order to become a **SAVE** Volunteer you need to complete the ATC-20 (Applied Technology Council) course. Upon completion of this course, your will be placed on the **SAVE** Coalition Register and be assigned to a unit of **SAVE** Volunteers.

Save Organizational Chart



The ATC-20 course is offered several times a year at various locations throughout the state. For information contact the statewide coordinators:

- | | |
|--|--|
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1214 Moreau Dr.
Jefferson City, MO 65101
(573) 635-4270 | Ed Rackers Jr.
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Jefferson City, MO 65109
(573) 634-2509 |
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